

# Special Operations Forces Industry Conference

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## COL Doug Rombough

Program Executive Officer-Rotary Wing

### Portfolio Review

# Rotary Wing

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# AGENDA

- Mission
- Achievements
- SOF Acquisition Team
- PEO Support
- SOF Rotary Wing Programs
- PEO Contact Info
- Way Ahead

## ROTARY WING



# MISSION

**Provide acquisition oversight management for Rotary Wing Systems in USSOCOM. Support all stakeholders in Rotary Wing Acquisition process to provide cutting edge capabilities to the SOF Community**

## ROTARY WING





# The Year In Review

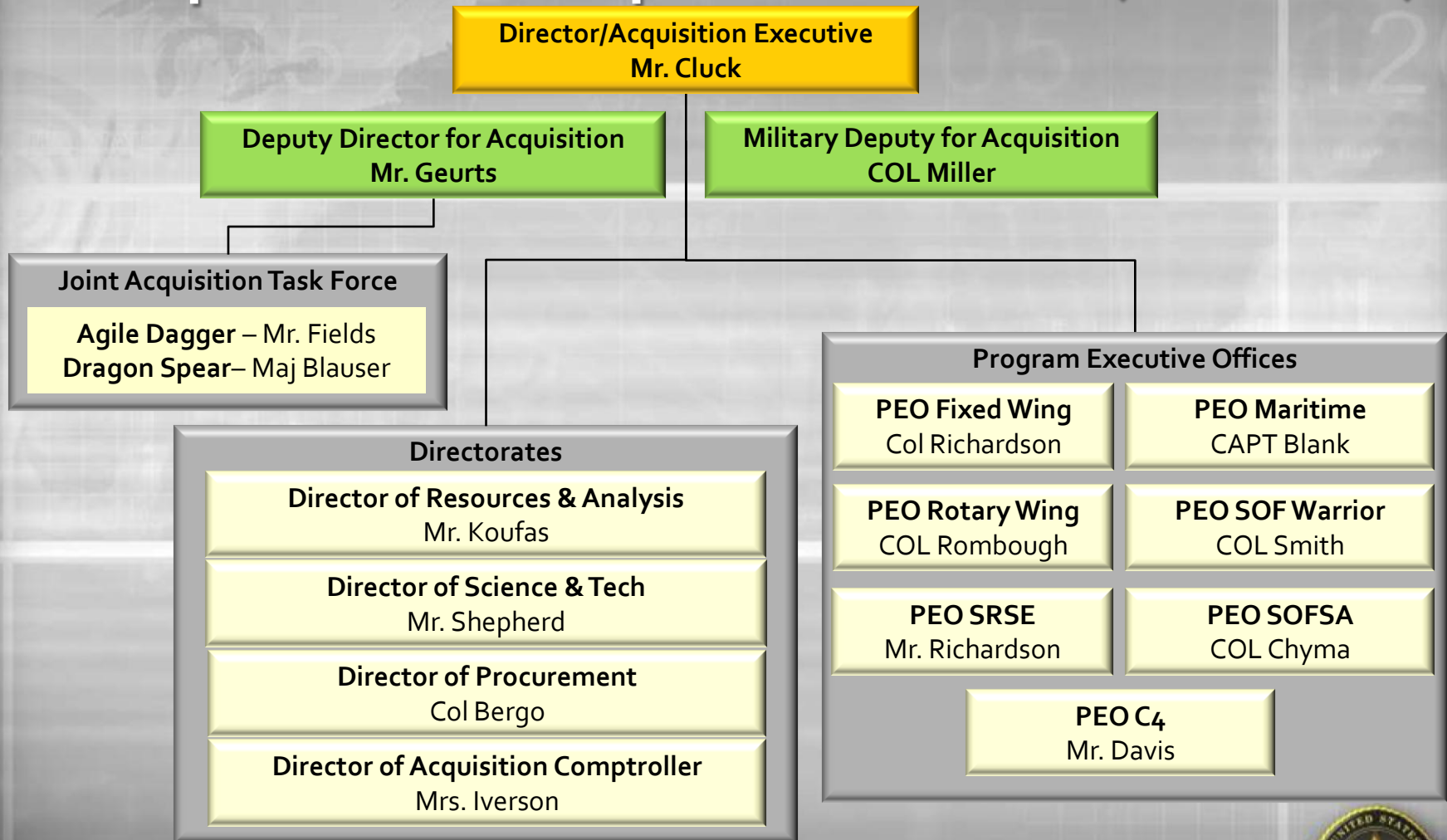
## SOF Acquisition Team deliveries and major events:

- ✓ 12 MH-47G aircraft delivered to the 160th SOAR
- ✓ 18 A/MH-6 Block 2.0 Upgrade completed and returned to the 160th SOAR
- ✓ 20 MH-60 aircraft inducted in the SOFSA production line
- ✓ 5 MH-60Ms fielded in support of training
- ✓ 12 SIRFC shipsets delivered to the 160th SOAR

# ROTARY WING



# Special Operations Research, Development and Acquisition Center (SORDAC)



## ROTARY WING



# SOF ACQUISITION TEAM

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Equip the Soldiers and Airmen of the 160th SOAR(A) and 6<sup>th</sup> SOS with the most capable rotary wing aircraft in the world.

Facilitate sustainment of the modified and/or unique aircraft provided to the 160th SOAR(A) and 6<sup>th</sup> SOS.



**ARSOAC / AFSOC**  
**(Capability Manager)**



**PEO RW (USSOCOM)**  
**(Program Oversight)**



**160<sup>th</sup> SOAR (A) - SIMO / 6<sup>th</sup> SOS**  
**(Users)**



**PM TAPO / PM NSRWA / PM STS**  
**(Materiel Developer)**

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# PEO Support

- **Quality Equipment Fielded as Quickly as Possible**
  - Aviation Warfighter is the First Priority
  - Quality is Better than Quantity
- **Single Point of Contact within USSOCOM**
  - Provide Management Oversight
  - Provide Program & Financial SMEs
- **Build/Foster Relationships**
  - Within the SOF Community
  - Leverage Army Aviation
  - Liaison to Congress
- **Future of SOF Vertical Lift**
  - Next Generation Aircraft

## ROTARY WING



# Acquisition Principles

- Deliver capability to the user expeditiously
- Exploit proven techniques and methods
- Keep Warfighters involved throughout the process
- Take risk and manage it!

*ACCELERATE THE FORCE*

**ROTARY WING**





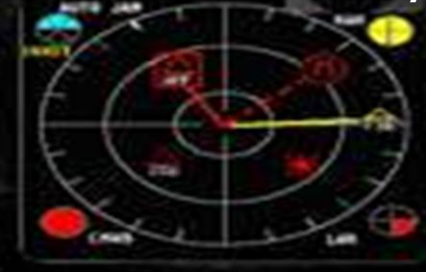
Mi-17 NSRW



Sensors



Aircraft Survivability



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MH-60M



MH-47G CMS



YMQ-18A



CAAS



A/MH-6M CMS



PEO Rotary Wing



MH-47G



Avionics/Navigation



Ballistic Protection



A/MH-6M

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# SOF RW Capabilities

## A/MH-6M MELB

Mission Equipped Little Bird (MELB)  
Light Attack/Assault  
\* 6 Combat Equipped Troops (Assault)  
\* Cruise Speed: 90 knots  
\* Max Gross Weight: 4,700 lbs  
Rapidly Deployable  
Shipboard Operations  
Surgical Point Insertion  
Aerial Reconnaissance  
Close Air Support  
Reconfigurable Armament (Attack)



## Mi-8/17

Medium Assault  
\* 32 Combat Equipped Troops  
\* Cruise Speed: 130 knots  
\* Max Gross Weight: 28,600 lbs  
\* Ext Loads: 10K lbs  
Troop Movement  
Resupply



## MH-60M Blackhawk

Medium Assault  
\* 9 Combat Equipped Troops  
\* Cruise Speed: 140 knots  
\* Max Gross Weight: 24,500 lbs  
\* Ext Loads 9,000 lbs  
Aerial Refuel Capable  
Suppressive Fire Capability  
Resupply  
Advanced Aircraft Survivability Equipment  
Defensive Armed Penetrator (DAP)  
Reconfigurable Armament  
Armed Escort & Close Air Support



## MH-47G Chinook

Heavy Assault  
\* 44 Combat Equipped Troops  
\* Cruise Speed: 120 knots  
\* Max Gross Weight: 54,000 lbs  
\* Ext Loads:  
25K lbs tandem & 26K lbs center hook  
Aerial Refuel Capable  
Suppressive Fire Capability  
Resupply  
Advanced Aircraft Survivability Equip



## YMQ-18A Hummingbird

Unmanned Aerial System  
Multi-role Missions (ISR/Re-Supply)  
\* Gross Weight : 5500 lbs  
\* Payload: 2500 lbs  
\* Range: 2250 NM  
\* Endurance: 18.7 hrs w/300 lbs  
12.1 hrs w/532 lbs  
8.1 hrs w/1000 lbs  
\* Speed: 142 kts  
\* Ceiling : 20000 ft



# ROTARY WING





# MH-47G CHINOOK

## 54,000 Pounds

Enhanced Air Transportability  
Pylons

Common Avionics Architecture  
System (CAAS) Cockpit

Standardized Engines  
(T55-GA-714A)

Suite of Integrated Radio Frequency  
Countermeasures (SIRFC)

zAircraft  
Max Gross Wt (54,000 lbs)

AN/AVR-2B Laser  
Detection System

New Electro-Optical Sensor  
System (EOSS FLIR)

Multi-Mode Radar (MMR)

Rescue  
Hoist

Infrared Exhaust  
Suppressors (IES-47)

Aerial Refuel Probe

XM-216 Dark Flares

New-Build Nose/Cockpit Structure

Expanded Left-forward  
Gunner's Window

Common Missile Warning System (CMWS)  
w/ Improved Countermeasures Dispenser

Standardized Extended  
Range (Fat Tank)  
Configuration

Improved Bilge Paint  
& Corrosion Protection

Rebuilt Airframe Structure (New  
Elect. Wires/ Hydraulic Lines)

Component Recapitalization

WHITE = Army Provided

RED = SOF Unique

YELLOW = SOF Driven-Tested / Army-Adopted



# MH-60M BLACKHAWK

## 24,500 Pounds

NEW Airframe and  
Dynamic Components

Active Vibration  
Control

Wide Chord Blades

2500 SHP YT706-GE-700 Engines

Dual Digital Automatic  
Flight Control System

Electric External  
Rescue Hoist

Aerial Refuel Probe

60 KVA Generator

Common Avionics  
Architecture System (CAAS)  
Cockpit

Multi-Mode Radar

AN/AVR-2B Laser Detecting Set

XM-216 Dark Flares

Common Missile Warning System (CMWS)  
w/Improved Countermeasures Dispenser

Suite of Integrated  
Radio Frequency Countermeasures  
(SIRFC)

AN/ZSQ-2  
Advanced Electro-Optic  
Sensor System (EOSS FLIR)

WHITE = Army Provided

RED = SOF Provided

YELLOW = SOF Driven-Tested / Army-Adopted

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# A/MH-6M MELB

## 4,700 Pounds

6 Bladed Main Rotor System

4 Bladed Tail Rotor System

MARK IV  
Rails

FLIR A-Kit

Improved Engine Inlet and  
Inlet Barrier Filter (IBF)

WD-6 Digital Cockpit  
Management System (CMS)

Crashworthy/ 0.50  
Caliber Ballistic Main  
Fuel Tanks

External Conformal Fuel Tanks

Allison 250C-30R/3M w/ FADEC  
600shp Transmsn/Drive Sys (30 min.)

Cambered  
Vertical Fin

Enlarged Aft Cargo  
Doors & Opening

Improved Tail Stinger

Lightweight AH and  
MH Plank Systems

Fast Rope Release System (FRIES)

4700 lb Landing Gear

FADEC= Full Authority Digital Engine Control  
FLIR= Forward Looking Infrared

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# NSRWA Mi-17

## 28,660 Pounds

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### Aircraft Characteristics and Performance

Rotor Diameter	69.9 ft
Fuselage Length	59.7 ft
Fuselage Width	8.2 ft
Height	18.2 ft
Disc Area	3,830 sq ft
Empty Weight	15,685 lb
Loaded Weight	24,500 lb
Max Takeoff Weight	28,660 lb
Max Flight Speed	156 mph
Cruise Flight Speed	149 mph
Hover Ceiling Out of Ground Effect	13,000 ft
Service Ceiling	16,000 ft
Range with Normal Payload	345 nm

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# YMQ-18A HUMMINGBIRD

## 5,500 Pounds

Low Disk  
Loading

Advanced  
Airfoil

Lightweight, Stiff  
Graphite Composite  
Blades

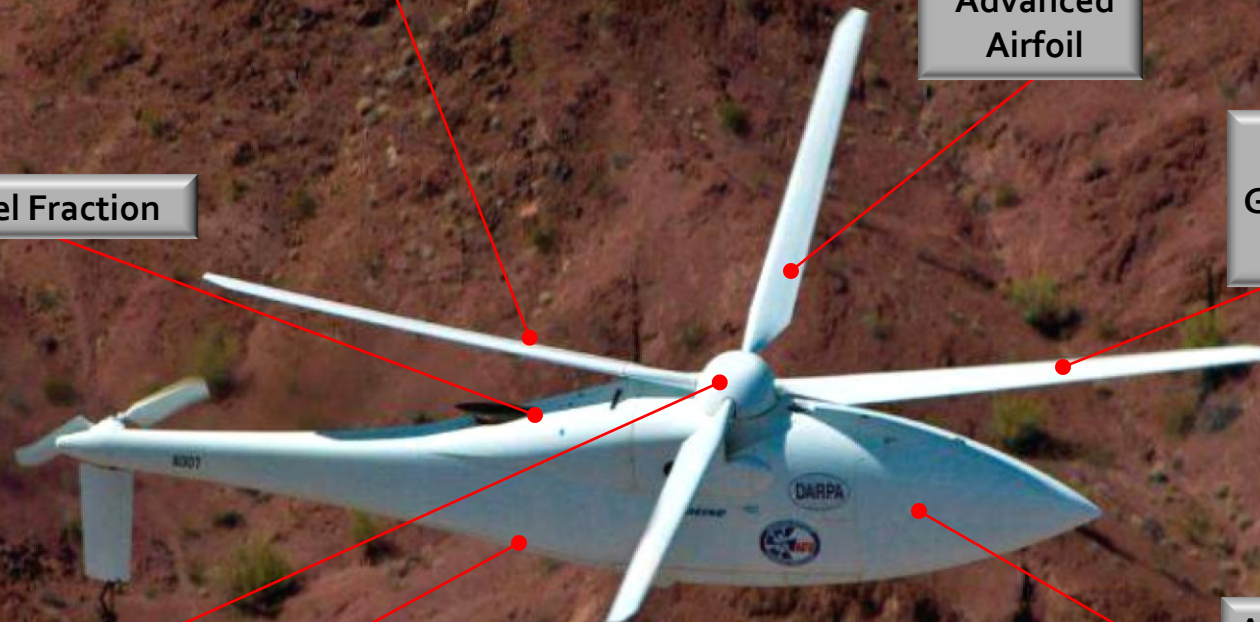
High Fuel Fraction

Autonomous  
Flight  
Management

Hingeless  
Rigid Rotor

Composite  
Airframe

Optimum Speed Rotor Adjusts RPM 200 to 400



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# Combat Mission Simulators

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MH-47E CMS



A/MH-6M Little Bird



MH-47G CMS



**"SimAuthor"**

Flight Data Analysis &  
Visualization

Battle Staff Training System



"CAAS" Desktop  
Trainers



"SOFTEAMS"

MH-60K CMS



Direct Support Maintenance



Aquatics Training  
Facility (Dunker)

MH-60L/M CMS



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# Way Ahead

## Planning for the next five years:

- MH-60M fielding
- MH-47G Plus 8
- MH-47 2.3 Block Upgrade
- A/MH-6 3.0 Block Upgrade
- Hostile Fire Indicating System (HFIS)
- Aircraft Occupant Ballistic Protection System (AOBPS)
- Reduce Optical Signature Emission Solution (ROSES)
- Secure Real-Time Video (SRTV)
- Upgrade Legacy Simulators
- Research Technology for Degraded Visual Environment (DVE)

# ROTARY WING





# Questions



## ROTARY WING

